

# ANNUAL MEETING

*SOUTHERN CALIFORNIA ACADEMY OF SCIENCES*

May 29–30, 2009



*Marymount College*  
*Rancho Palos Verdes, CA*

### Future SCAS Meetings

2010 – California State University, Los Angeles  
2011 – California Polytechnic University, Pomona  
2012 – Occidental College

### Acknowledgements

The Southern California Academy of Sciences wishes to acknowledge the following organizations and people for their support of the 2009 Annual Meeting.



The Port of Los Angeles



Palos Verdes Land Conservancy

### Marymount College

Special thanks to the SCAS 2009 Annual Meeting Local Committee at Marymount College:  
Ann Dalkey

### SOUTHERN CALIFORNIA ACADEMY OF SCIENCES ANNUAL MEETING STUDENT PRESENTATION AWARDS

Over 40 students entered this year's competition for SCAS student-presentation awards. Awards were given in the categories of Biological and Physical Sciences for both posters and talks. Owing to the large number of student presentations in both categories of the Biological Sciences, two Honorable Mention awards were given. First-place award winners received \$100 and Honorable mention winners received \$50.

### Student Presentation Awards

#### Physical Science – 1<sup>st</sup> Place Talk

**Kimbrie L. Gobbi**, Patricia V. Narwold, Sarah C. Gray, University of San Diego, Marine Science and Environmental Studies Department

**INORGANIC SEDIMENT SOURCE, FLUX, AND COMPOSITION WITHIN BAYS IN ST. JOHN, U.S. VIRGIN ISLANDS**

**Molecular Biology and Physiology – 1<sup>st</sup> Place Talk**

**Brar NB<sup>1,2</sup>**, Waggoner CM<sup>1,2</sup>, Reyes JA<sup>1,2</sup>, Fairey R<sup>3</sup>, and Kelley KM.<sup>1,2</sup>

<sup>1</sup>Environmental Endocrinology Laboratory Department of Biology, CSULB, CA 90840.

<sup>2</sup>Institute for Integrated Research on Materials, Environment, and Society, CSULB, CA 90840.

<sup>3</sup>Marine Pollution Studies Laboratory, Moss Landing Marine Laboratories, CA

**DOCUMENTATION OF THYROID ENDOCRINE DISRUPTION IN PACIFIC STAG-HORN SCULPIN (*LEPTOCOTTUS ARMATUS*) AND SHINER SURFPERCH (*CYMATOGASTER AGGREGATA*) RESIDING IN SAN FRANCISCO BAY**

**Ecology and Evolution – 1<sup>st</sup> Place Talk (tied)**

**A.W. Fredell** and D. C. Zacherl, California State University Fullerton, Fullerton, CA, 92834

**OUT OF THE SAND AND INTO THE SURF: DETERMINING PHILOPATRY AND POPULATION CONECTIVITY IN THE CALIFORNIA GRUNION, *LEURESTHES TENUIS* (ATHERINOPSIDAE).**

**Danielle Y. Trathen** California State University, Los Angeles

**COMPARATIVE PHYLOGEOGRAPHY OF CARIBBEAN SEA SLUGS WITH LONG-LIVED VS. SHORT-LIVED LARVAE**

**Ecology: Honorable mention (2 papers)**

**Lisa Komoroske<sup>1</sup>**, Rebecca Lewison<sup>1</sup>, Peter H. Dutton<sup>2</sup>, Jeffrey Seminoff<sup>2</sup>, Dimitri Deheyn<sup>3</sup>

<sup>1</sup>San Diego State University; <sup>2</sup> NOAA- Southwest Fisheries Science Center;

<sup>3</sup>Scripps Institution of Oceanography

**EVALUATING CONTAMINANTS IN AN ENDANGERED SPECIES INHABITING AN URBANIZED COASTAL ECOSYSTEM: *BIOACCUMULATION AND HEALTH EFFECTS IN THE EAST PACIFIC GREEN TURTLE (CHELONIA MYDAS) IN SAN DIEGO BAY***

**M.N. Garchow** and P. Krug. CSU Los Angeles, Department of Biology, Los Angeles, CA, 90032.

**POPULATION DYNAMICS AT A SHIFTING RANGE BOUNDARY BETWEEN SISTER SPECIES OF ESTUARINE SEA SLUG: ROLE OF THE PHYSICAL ENVIRONMENT VERSUS LARVAL SUPPLY**

**Poster Awardees**

**Physical Science – 1<sup>st</sup> Place**

**REZAIE BOROON, M. H.**, California State University, Los Angeles, CA, mrezaie@calstatela.edu, **RAMIREZ, P.**, California State University, Los Angeles, CA,

**COMBINED GEOCHEMICAL AND DIGENETIC PROCESSES CONTROL THE CADMIUM ENRICHMENT IN SEDIMENTARY ROCKS OF SOUTHERN TOGO, WEST AFRICA**

### Molecular Biology and Physiology – 1<sup>st</sup> Place

**Sergio Sandoval**, University of La Verne Biology Department, 1950 Third St. La Verne, CA 91750

**AN INVESTIGATION OF THE MECHANISM OF METHOXYCHLOR IMPACT ON THE DEVELOPMENT OF THYMOCYTES.**

### Ecology and Evolution (3 awardees)

**T. Duong**, J. Gov, and G. Liu. UCLA, Department of Ecology and Evolutionary Biology, Los Angeles, CA, 90095.

**AGGREGATING BEHAVIOR AND SPECIES PREFERENCE IN THREE SPECIES OF GUNNEL: *Apodichthys flavidus*, *Apodichthys fucorum* and *Pholis ornate*.**

**W. Liu**, C. Mac, and S. E. Walker. Department of Biological Science, California State University Fullerton, Fullerton CA 92831

**THE IMPACT OF FIGHTING STRESS ON LIFESPAN IN THE HOUSE CRICKET (*ACHETA DOMESTICUS*)**

**N.P. West** and K.A. Dickson, California State University Fullerton, Department of Biological Science, Fullerton, CA, 92831.

**OCULAR MUSCLES AS A HEAT SOURCE FOR CRANIAL ENDOTHERMY IN THE SHORTFIN MAKO SHARK, *ISURUS OXYRINCHUS***

### **Student Grants**

The Southern California Academy of Sciences supports a program of Grants to graduate and undergraduate students. One stipulation for the winners is that they present their research at the following year's Annual Meeting. This years award winners were

**Tracey Magrann** Loma Linda University Department of Earth and Biological Sciences

Nutrient Threshold for Production of Cyanobacterial Toxins in Southern California Lagoons, Bays, and Lakes

**Thomas Farrugia** California State University, Long Beach, Dept of Biology

Biology Department

Site fidelity, residency time and habitat use of the shovelnose guitarfish (*Rhinobatos productus*) in a southern California estuary: assessing restoration success

**Chris Chabot** University of California, Los Angeles Department of Ecology and Evolutionary Biology

Comparative Phylogeography of the Grey Smoothhound (*Mustelus californicus*) and the Brown Smoothhound (*Mustelus henlei*) from the Northeastern Pacific